

What is claimed is:

1. A method for identifying a pluripotent hepatic progenitor cell, comprising detecting a sugar chain expressed on the pluripotent hepatic progenitor cell.

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2. The method according to claim 1, wherein the sugar chain is detected by using a protein capable of binding to the sugar chain expressed on the pluripotent hepatic progenitor cell.

10 3. The method according to claim 2, wherein the protein is a lectin capable of binding to the sugar chain expressed on the pluripotent hepatic progenitor cell.

4. The method according to claim 1, wherein the sugar chain expressed on the pluripotent hepatic progenitor cell comprises a sugar chain structure recognized by at least one lectin selected from the group consisting of kidney bean lectin, wheat germ lectin, lentil lectin and *Aleuria aurantia* lectin.

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5. The method according to claim 1, wherein the sugar chain is detected by using an antibody capable of binding to the sugar chain expressed on the pluripotent hepatic progenitor cell.

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6. The method according to claim 1, wherein the sugar chain is detected via an expression of an enzyme involved in the synthesis of the sugar chain expressed on the pluripotent hepatic progenitor cell.

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7. The method according to claim 6, wherein the expression of the enzyme is

detected by at least one means selected from the group consisting of the measurement of an enzyme activity, the measurement of the amount of the enzyme protein and the measurement of an amount of mRNA from a gene encoding the enzyme.

5 8. The method according to claim 6, wherein the enzyme is

N-acetylglucosaminyltransferase III, sialyltransferase or α -1,6 fucosyltransferase.

9. A method for separating a pluripotent hepatic progenitor cell, comprising
10 sorting the pluripotent hepatic progenitor cell using as an index a sugar chain expressed
on the pluripotent hepatic progenitor cell.

10. The method according to claim 9, wherein the pluripotent hepatic progenitor
cell is sorted by using a protein capable of binding to the sugar chain expressed on the
pluripotent hepatic progenitor cell.

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11. The method according to claim 10, wherein the protein is a lectin capable of
binding to the sugar chain expressed on the pluripotent hepatic progenitor cell.

12. The method according to claim 10, wherein the sugar chain expressed on the
20 pluripotent hepatic progenitor cell comprises a sugar chain structure recognized by at
least one lectin selected from the group consisting of kidney bean lectin, wheat germ
lectin, lentil lectin and *Aleuria aurantia* lectin.

13. The method according to claim 9, wherein the pluripotent hepatic progenitor
25 cell is sorted by using an antibody capable of binding to the sugar chain expressed on

the pluripotent hepatic progenitor cell.

14. A method for producing a composition comprising a pluripotent hepatic progenitor cell, comprising the step of separating the pluripotent hepatic progenitor cell
- 5 by the method of any one of claims 9 to 13.